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SHOAL LAKE & INDIAN BAY
1964
DISTRICT OF KENORA

THE
ONTARIO WATER RESOURCES
COMMISSION

WATER QUALITY SURVEY

OF THE
SHOAL LAKE AND INDIAN BAY
DISTRICT OF KENORA

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Report on a water quality
survey of the Shoal Lake and
Indian Bay, district of Kenora.

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R E P O R T

on

WATER QUALITY SURVEY

of the

SHOAL LAKE AND INDIAN BAY

District of Kenora

September 12, 1964,

Division of Sanitary Engineering

REPORT

ONTARIO WATER RESOURCES COMMISSION

A water quality survey of Shoal Lake and Indian Bay was undertaken on September 12, 1964.

GENERAL

Shoal Lake is a part of the Lake of the Woods watershed and is located approximately 30 miles west of the Town of Kenora. Indian Bay is an arm of Shoal Lake and extends across the provincial boundary into the Province of Manitoba. The City of Winnipeg, by means of a pipeline system, draws water for their municipal supply from the western section of Indian Bay.

Habitation and shore development on the Ontario section of Indian Bay consists mainly of approximately fifty Indian families on the Shoal Lake Reservation. A small number of private cottages and a fish packing station are located on the north shore of the narrows between Indian Bay and Shoal Lake. Development around the eastern section of Shoal Lake consists of part of the Shoal Lake Indian Reservation, The Pioneer summer camp, and a few summer cottages.

POTENTIAL SOURCES OF POLLUTION

Possible sources of pollution in Indian Bay could be from inadequately treated domestic wastes, fishery waste, or from

natural runoff.

The one fishery operates basically as a receiving station. The bulk of fish is packed in ice and shipped to other points for processing. A small amount of filleting is done for local consumption. The wastes from this operation are reportedly buried or dumped on waste land areas.

Available information indicates that privies are prevalent in the area, with only a few septic tank systems in operation.

WATER QUALITY ANALYSES

Water sampling points, as indicated on the accompanying map, were established in this water area in 1961. Water quality surveys have been conducted on a routine basis since that time.

The sanitary chemical and bacteriological analyses of samples collected are listed:

<u>Sample No.</u>	<u>Location of Sampling Point</u>	<u>5-Day BOD (ppm)</u>	<u>Total Solids (ppm)</u>	<u>Turbidity in Silica Units</u>	<u>Coliforms per 100 ml M.P.N.</u>
1	Shoal Lake - opposite Pioneer Camp	0.9	102	3.6	0
2	Shoal Lake - prior to the Narrows	1.2	72	4.0	0
3	Shoal Lake at mouth of Snowshoe Bay	0.8	94	3.1	23
4	Mouth of Indian Bay	1.2	84	4.0	23
5	Indian Bay near Manitoba Boundary	2.0	86	4.0	9

SIGNIFICANCE OF WATER QUALITY ANALYSES

The laboratory analyses of samples collected do not indicate any deterioration in water quality. The BOD and total coliform counts are well below the suggested Ontario Water Resources Commission objectives of 4 ppm and 2400 per 100 ml respectively, for surface-water quality.

SUMMARY

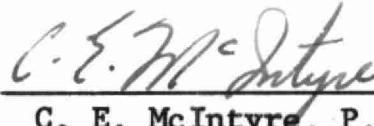
A water quality survey of Shoal Lake and Indian Bay was conducted on September 12, 1964.

Laboratory analyses of water samples collected showed no deterioration in water quality since the previous survey of October 30, 1963.

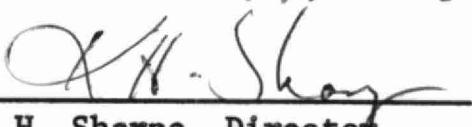
It is intended that water quality surveys will be conducted on these water areas on a routine basis of at least once per year, and more frequently if future water quality conditions indicate the need of such.

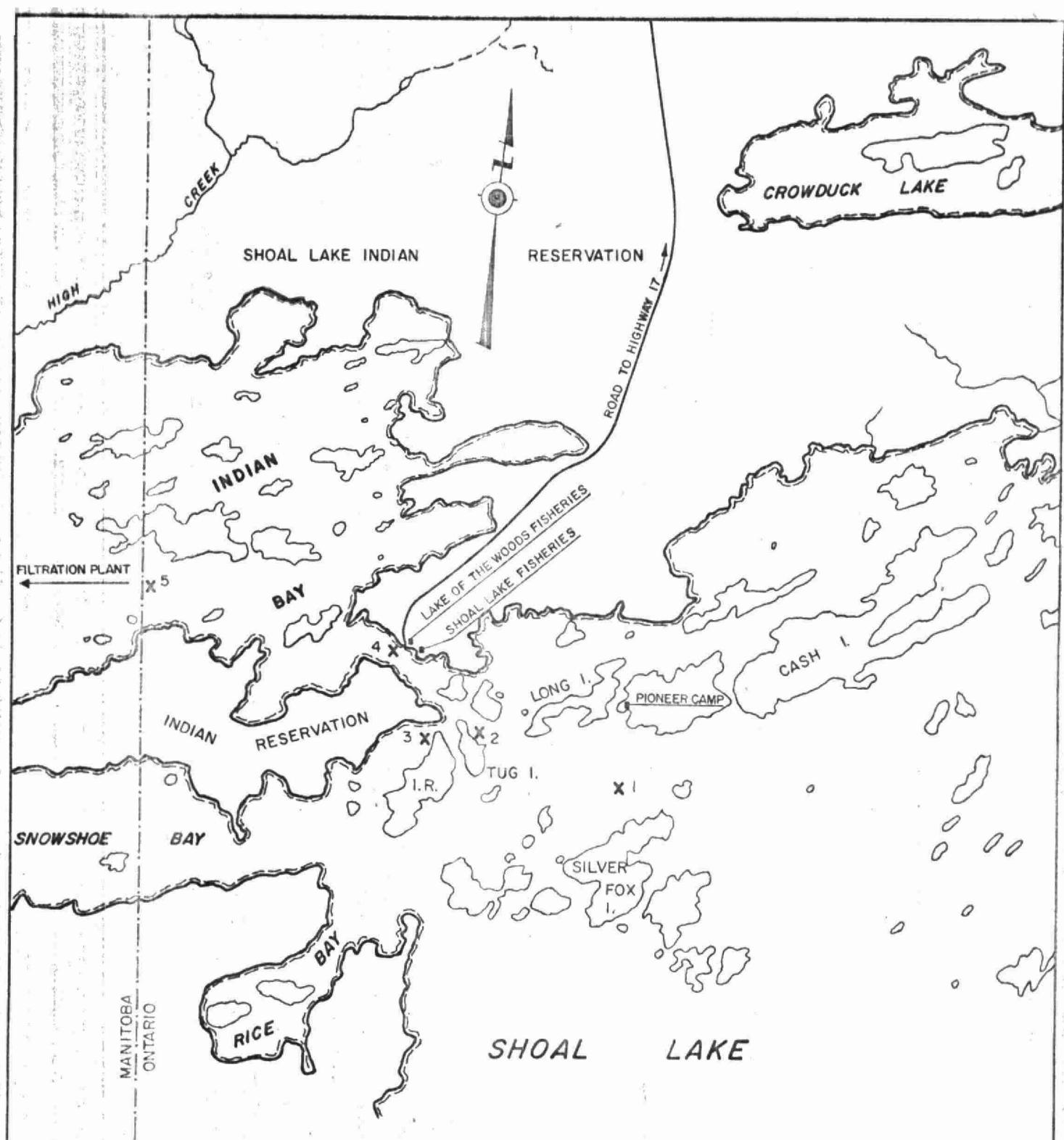
All of which is respectfully submitted,

District Engineer:


C. E. McIntyre, P. Eng.

Approved by:


K. H. Sharpe, Director.



ONTARIO WATER RESOURCES COMMISSION

INDIAN BAY

DISTRICT OF KENORA

SCALE: 1 INCH = 1 STATUTE MILE

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